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### **REMARKS**

Claims 1 - 17 are currently pending in the application. By this amendment, claims 1 and 9 - 17 are amended for the Examiner's consideration. The foregoing separate sheets marked as "Listing of Claims" shows all the claims in the application, with an indication of the current status of each.

Claims 1, 9 and 17 have been amended to more clearly state the intent and scope of the claim to address file translation with loops. The subject invention is specifically drawn toward the ambiguity problems associated with looping within the translation of flat file formats. The specification addresses the looping ambiguity problem in several places. For example, the first sentence of the Abstract states,

"Method and apparatus are provided which solves the looping problem in structural documents..."

In addition, on page 3, lines 7 - 9 states, "A significant benefit of the invention is the user-provided resolution of the ambiguities that arise from the looping problem."

These references directly relate to the amended language of the claims as follows,

"...identifying ambiguities within a structural document to include data loops that are not marked as loops;"

Therefore, this amendment does not constitute new matter and is fully supported by the specification.

Claim 9 has been amended to correct a typographical error. This error incorrectly used the term "the steps of" in the preamble of a system claim. This phrase has been deleted.

Claims 10 - 16 have been objected to because of the use of the phrase, "the method of..." These claims have been amended to correctly identify the claims as system claims and not method claims as noted by the Examiner.

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Claims 1 - 7 and 9 - 15 have been rejected under 35 U.S.C. 103 (a) as being unpatentable over Hsing et al. US2002/0023113 A1 in view of Kenton, US 2002/0035606 A1. This rejection is traversed.

With respect to claim 1, the amended claim more clearly focuses the subject invention toward the file translations associated with the presence of unidentified loops inherent in a flat file format like EDI. Neither Hsing or Kenton mention looping and any combination of Hsing and Kenton either together or alone would not support the feature as stated in claim 1 of the subject invention which recites,

"...identifying ambiguities within a structural document to include data loops that are not marked as loops;"

These loops are not usually identified with tags (see page 1, lines 25 - 26), thus causing the ambiguity as to their translation. The subject invention solves the ambiguity issues due to data loops that are not marked as loops as stated previously. In addition, the subject invention allows users to choose grouping options for individual data loops via rules. That is, extra grouping tags are created during the translation process AND attribute tags can also be created and added to some of the grouping tags to achieve the sorting effect. After completion of the translation, these 'attribute tags' are removed. Thus, the attribute tags are non-persistent. The subject invention provides a method for the users to choose which of the grouping tags will have attribute tags for achieving the different grouping/sorting options. The subject invention uses tags where they exist and assigns them (see paragraph beginning on page 6, line 3) relative to position if they do not exist as in the EDI formats. These tags are used to translate the data within the flat file format into an intermediate tree structure. Once the translation is completed, the subject invention removes the tags and presents the final translation. It is this use of the intermediate tree structure with the feature to assign 'attribute tags' with grouping tags to the unidentified loops that is one of the key distinguishing attribute of the subject invention. Neither Hsing nor Kenton provide an intermediate tree structure or the attribute tags to address the lack

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of position tags in the EDI file format. Therefore, it is not obvious to use an intermediate table as in the subject invention.

With respect to claim 2, Hsing does not provide the feature to structure the documents using multiple tags within the groupings of the hierarchical tree structure. The subject invention is presenting a method that addresses the ambiguities associated with data loops by forming rule based groupings of the data segments and data elements. Hsing uses an elementary grouping of the nodes that does not recognize the type of transaction but simply sorts on a path length as in claim 2, page 6 of Hsing that recites, "...grouped together such that shorter XQL paths will be listed ahead of longer XQL paths on the same branch, and nodes on a common XQL branch will be listed as a group."

This is significantly different from the subject invention. As stated on page 3, lines 3 - 9 of the subject invention,

"The data grouping method is performed in accordance with user specifications. Depending on the document structure, there may be multiple locations/tags that the user desires to have different groupings. The table embeds user-defined, or automatically defined in accordance with user preferences, structural information for recording hierarchical data groupings."

Thus, the subject invention provides groupings that are able to use multiple tags and/or locations while Hsing is limited to a single tag per grouping as discussed in paragraph 22, page 3 that states, "Each node in the DOM corresponds to an XML tag." Hsing actually precludes a hierarchical structure using multiple tags per grouping. Hsing, page 2, paragraph 21, states, "...the XML tag... represents the database, and is located at the highest level." The subject invention is able to sort and group with tags of multiple types located throughout the hierarchical tree structure as shown in Figures 5 B and C and discussed on page 7, lines 21 - 27 of the subject document. Therefore, there is no combination of Hsing with Kenton that could result in the subject invention.

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As for claims 3 - 6, these claims all depend from claim 1 and as such, are unique due to the intermediate tree structure discussed above. Neither Hsing nor Kenton discuss the use of an intermediate tree which assigns tags for the translation and then removes the tags for the final tree structure as does the subject invention. Thus, the concept of sub-tree tags in claim 3 is relative to the intermediate tree feature used to address the looping ambiguity of claim 1 and the two-columned table used to define the rules for sorting is also relative to the intermediate tree structure. Claim 5 discusses the Document Object Model (DOM) relative to the intermediate tree structure. Claim 6 specifically cites the use of the interim tree structure which is not a feature of either Hsing or Kenton. Thus claims 3 through 7 are not obvious over Hsing and Kenton.

With respect to claim 7, which depends from claim 1, the Examiner acknowledges that neither Hsing nor Kenton uses a graphical user interface to specify the translation rules. The rules, as defined by Hsing and Kenton do not address the multiple tagging features and, therefore, the loop ambiguity resolution as provided by the features of claim 1 from which claim 7 depends. Therefore, the suggestion that a user interface as cited by the Examiner for Kenton would be obvious in the subject invention is incorrect. The graphical interface of the subject invention identifies translation rules relative to multiple tagging and position locations as well as for an intermediate tree structure. These features are not addressed by either Hsing or Kenton. Therefore, there is no combination of Hsing together or alone that would result in the features of the subject invention.

As for claims 9 - 15 and 17, as noted by the Examiner, these claims are relative to the system for performing the method of claims 1 - 7 and 8 respectively. As such, these claims are also unique for the same arguments as discussed above.

Claims 8 and 16 have been rejected under 35 U.S.C. 103 (a) as being unpatentable over Hsing in view of Kenton and further in view of Carter, US Patent 5,878,419. This rejection is traversed.

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Although Carter mentions that EDI file format does not label or mark the loops, Carter does not provide a solution to this ambiguity as that which is provided by the subject invention. Furthermore, Carter disclaims the use of an intermediate tree structure (column 11, lines 56 - 59) which recites, "FIG. 13 is not an essential intermediate data structure, but merely represents one of many ways that data elements can be tagged with unique persistent tags." Therefore, Hsing, Kenton, and Carter, either together or separately will not result in the features provided by the subject invention.

In view of the foregoing, it is requested that the application be reconsidered, that claims 1 - 17 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at 703-787-9400 (fax: 703-787-7557; email: mike@wcc-ip.com) to discuss any other changes deemed necessary in a telephonic or personal interview.

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If an extension of time is required for this response to be considered as being timely filed, a conditional petition is hereby made for such extension of time. Please charge any deficiencies in fees and credit any overpayment of fees to Deposit Account 50-0510 (IBM-Yorktown).

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Michael E. Whitham', is written over a horizontal line.

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